

Abstract of the Disclosure

A surface shape recognition sensor includes a plurality of capacitive detection elements, a support electrode, a protective film, and a plurality of projections. The capacitive detection elements are 5 formed from lower electrodes and a deformable plate-like upper electrode made of a metal. The lower electrodes are insulated and isolated from each other and stationarily laid out on a single plane of an interlevel dielectric formed on a semiconductor substrate. The 10 upper electrode is laid out above the lower electrodes at a predetermined interval and has a plurality of opening portions. The support electrode is laid out around the lower electrodes while being insulated and isolated from the lower electrodes, and formed to be 15 higher than the lower electrodes to support the upper electrode. The protective film is formed on the upper electrode to close the opening portions. The projections are laid out in a region of the protective film above the capacitive detection element. A method 20 of manufacturing the surface shape recognition sensor is also disclosed.

PCT/US2007/035262